CLAIMS

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Communication system, comprising a first communication path between a services station and a user station as well as a second communication path between the user station and the services station, the user station being arranged for the issuing of data packets according to a first protocol and the services station being arranged for the reception of data packets according to the first protocol, the second communication path comprising:

- a first network arranged for the transmission of data according to a second protocol,
- a first device for receiving data packets from the user station and for supplying said data packets to the first petwork, and
 - a second device for receiving said data packets from the first network and for routing the received data packets to the services station via a second network arranged to the transmission of data according to the first protocol.
 - 2. Communication system according to claim 1, in which the second device is arranged for establishing a path to the services station, a path identifier being assigned to said path, and for providing received data packets with said path identifier.
- 20 3. Communication system according to claim 1, in which a second device is arranged for providing access to a group of services stations, a single access?

 number being common to said group of services stations.
 - 4. Communication system according to claim 1, in which a second device is arranged for providing access to a single services station, the device having a unique access number.
 - 5. Communication system according to claim 1, in which the first network comprises a telephony network.

- 6. Communication system according to claim 1, in which the first network comprises an ISDN network.
- 7... Communication system according to claim 1, in which the first communication path comprises a satellite trajectory.
- 5 8. Communication system according to claim 1, in which the first communication path comprises a cable network.
 - 9. Communication system according to claim 1, in which the first protocol is the ATM (Asynchronous Transmission Mode) protocol
- 10.) Device for the issuing of data packets, received over a non-packet switching network, to a packet switching network, the device comprising:
 - means for the demodulation of received signals,
 - means for the extraction of data packets from the demodulated signals,
 - means for the buffering of data packers,
- means for the routing of data packets on the basis of information 15 received from the non-packet switching network,
 - means for the multiplexing of data packets,
 - means for the supply of multiplexed data packets to a packet switching data connection, and
 - means for the control of the device.
- 20 11. Device according to/claim 10, further comprising:
 - means for the demultiplexing of data packets,
 - means for the buffering of data packets,
 - means for the conversion of data packets into serial data signals,
 - means for the modulation of the data signals, and
- 25 means for the issuing to a network of the modulated data signals.
 - 12. Device according to claim 10, in which the means for the extraction of data packets are arranged for the extraction of ATM cells, and in which the

packet switching data connection comprises an SDH connection.

- 13. Device according to claim 10, in which the means for the extraction of data packets are arranged for the extraction of X.25 packets, and in which the packet switching data connection comprises an ISDN connection.
- 5 14. Device according to claim 10, provided with means for the modification of the addresses of data packets.
 - 15. Method for the transmission of ATM cells over a non-packet switching network, comprising at the transmitting end:
 - converting an ATM cell into a serial form;
- 10 modulating the data of the ATM cell;
 - selecting a connection over the network;
 - transmitting modulated data over the network; and comprising at the receiving end:
 - receiving the modulated data;
- 15 demodulating the data;

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- converting the demodulated data into a parallel form;
- reconstructing the ATM cell,
- deriving a path identifier from signalling information received over the non-packet switching network, and
- 20 modifying the address of the data packet by assigning said path identifier to the data packet.
 - 16. Method according to claim 15, in which the network comprises a switched public telephony network.
 - 17. Method according to claim 15, in which the network comprises an ISDN network.
 - 18. Method according to claim 15, in which the ATM cell is transmitted in X.25 packets.

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- 19. Method of providing a telecommunication service, comprising: the transmission of user information from a services station via a first, unidirectional communication path; the reacting upon the user information by a user; the transmission of selection information in data packets by the user over a second communication path to the services station, the second communication path comprising a non-packet switching network; and the adaptation of the user information to the selection information.
- 20. Method according to claim 19, in which the data packets comprise ATM cells.